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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,410	01/05/2005	Yosuke Egawa	040707	2961
23850	7590	11/28/2006		
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			EXAMINER TOSCANO, ALICIA	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,410

Applicant(s)

EGAWA, YOSUKE

Examiner

Alicia M. Toscano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/5/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1-10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obuchi (JP 2001049098) in view of Terada (US 6326440).

Obuchi discloses lactic acid resins and molded articles from said resins. Said resins comprise lactic acid and a polyester (abstract). The polyester resin can be added up to 100 wt parts of 100 wt pts lactic acid (Abstract), meeting the composition requirements of Claim 1. The resulting composition is formed into a sheet and stretched in at least one direction to obtain a crystallinity of 10-60%. The melt extrusion temperature is disclosed to be in the range of 100-280C for the resin. The temperature of melt extrusion is chosen to be high enough to melt the resin yet not excessively high

as to increase the cost of production. Thus, as the range of melt extrusion is above 90C, Examiner finds the use of a resin with a T<sub>m</sub> greater than 90C to be met by Obuchi.

Obuchi does not disclose the T<sub>g</sub> of said polyester. Terada discloses biodegradable films comprising polylactic acid and polyesters. Terada further discloses the use of a polyester which has a T<sub>g</sub> of less than 0C in order to improve shock and cold resistance (Column 5 Lines 15-17). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Obuchi the use of a T<sub>g</sub> of 0C or less, as taught by Terada, in order to improve the shock and cold resistance of the resulting film.

As the composition requirements have been met, Examiner finds the volume reduction ratio of 6% or less to be inherent. Thus, Obuchi and Terada meet the limitations set forth in Claims 1-6 and 12-15. Obuchi further discloses molded articles from said film in [0052], meeting the limitations of Claims 7, 8 and 10. The sheet is post-crystallized by stretching, as further required in Claim 9.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obuchi in view of Terada in further view of Yamada (WO 2003/022927, US 20050043462 is used as an equivalent English document).

Obuchi and Terada include elements of the invention as discussed above. Obuchi and Terada do not include post-crystallization of the molded article produced from said resin.

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Yamada discloses biodegradable resin compositions, and molded articles from said compositions. Yamada discloses a post-crystallization step of the molded article, in order to increase the crystallization of the resulting object [0065]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Obuchi and Terada, the use of a post-crystallization step, as taught by Yamada, in order to further increase the crystallization of the resulting object.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 4, 7 and 8 of copending Application No. 10595261. Although the conflicting claims are not identical,

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they are not patentably distinct from each other because the composition and property requirements set forth in Instant Claims 1-6 and 12-15 are met by Claim 3 of '261.

Instant Claims 1-6 and 12-15 require 75-25 % PLA and 25-75% polyester, where the polyester has a Tg of less than 0C and a melting temp higher than 90C, with a degree of crystallization of less than 45 or 20%. Claim 3 of '261 discloses a composition comprising 25-75% polyester, 75-25% PLA, with a Tg less than 0C and a melting temp higher than that of the PLA, and with a degree of crystallization of less than 20%.

Further, Instant Claim 2 is met by Claim 4 of '261, Instant Claims 7-9 are met by Claim 7 of '261 and Instant Claims 10-11 are met by Claim 8 of '261.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

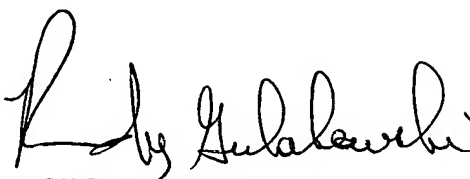
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT0



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